

### ABSTRACT

A frequency dependent telecommunication hybrid circuit adapted to operate according to the Asymmetric Digital Subscriber Line [ADSL] protocol wherein the frequencies of the receive frequency band are lower than those of the transmit frequency band. The hybrid circuit is provided with series impedances ( $R_1$ ,  $Z_1$ ;  $R_2$ ,  $Z_2$ ) comprising devices ( $Z_1$ ,  $Z_2$ ) having frequency dependant impedances. Owing to these frequency dependant impedances, the hybrid circuit behaves as a frequency band filter showing a different impedance in function of the frequency band. As a result, the power consumption is reduced in the transmit direction where the series impedances are relatively low. However, the values of the series impedances remain relatively high in the receive direction in order to avoid bit rate reduction.

The figure is attached.